

IN THE CLAIMS:

Claims 1-21. (cancelled).

Claim 22. (New) An isolated or purified heterodimeric receptor complex comprising a polypeptide of the amino acids as set forth in SEQ ID NO:2 and a polypeptide of the amino acids as set forth in SEQ ID NO:4.

Claim 23. (New) The receptor complex of Claim 22 that specifically binds a polypeptide of amino acids 1-131 as set forth in SEQ ID NO:6.

Claim 24. (New) An isolated or purified expression vector comprising a first polynucleotide operably linked to a first promoter, the first polynucleotide encoding a polypeptide of the amino acid sequence as set forth in SEQ ID NO:2, and a second polynucleotide operably linked to a second promoter, the second polynucleotide encoding a polypeptide of the amino acid sequence as set forth in SEQ ID NO:4.

Claim 25. (New) The vector of Claim 24, wherein the polypeptides of SEQ ID NO:2 and SEQ ID NO:4 comprise a heterodimeric receptor complex, wherein the receptor complex binds a polypeptide of amino acids 1-131 of SEQ ID NO:6.

Claim 26. (New) A method of making a heterodimeric complex of the polypeptides of SEQ ID NO:2 and SEQ ID NO:4, comprising co-expression by the vector of Claim 24 of the first polynucleotide and the second polynucleotide.

Claim 27. (New) A method of treating a subject suffering from an immune or proliferative disorder comprising administering an effective amount of:

- a) an agonist of IL-B50 (SEQ ID NOs:5 or 6); or
- b) an antagonist of IL-B50 (SEQ ID NOs:5 or 6).

Claim 28. (New) The method of Claim 27, wherein the agonist stimulates expression and the antagonist inhibits expression of:

- a) TARC;
- b) DC-CK1;
- c) MDC; or
- d) MIP3beta.

Claim 29. (New) The method of Claim 28, wherein expression is by a:

- a) myeloid cell;
- b) monocyte; or
- c) dendritic cell.

Claim 30. (New) The method of Claim 27, wherein:

- a) the agonist increases or stimulates maturation of a dendritic cell (DC); or
- b) the antagonist decreases or inhibits maturation of a DC.

Claim 31. (New) The method of Claim 30, wherein the DC is a CD11c⁺ DC.

Claim 32. (New) The method of Claim 27, wherein the agonist increases or stimulates and the antagonist decreases or inhibits:

- a) HLA-DR expression;
- b) CD86 expression;
- c) CD40 expression;
- d) CD80 expression;
- e) CD11a expression;
- f) CD18 expression;
- g) CD83 expression; or
- h) dendritic cell viability.

Claim 33. (New) The method of Claim 27 wherein:

- a) the agonist stimulates development or proliferation of antigen presenting cells (APCs) or T cells; or
- b) the antagonist inhibits development or proliferation of APCs or T cells.

Claim 34. (New) The method of Claim 33, wherein the T cell is a:

- a) CD4⁺CD45RA T cell; or
- b) CD8⁺ T cell.

Claim 35. (New) The method of Claim 27, wherein the agonist or antagonist modulates expression of a cytokine by a T cell.

Claim 36. (New) The method of Claim 35, wherein the agonist stimulates or increases expression and the antagonist inhibits or decreases expression of:

- a) IL-4;
- b) IL-13; or
- c) TNFalpha.

Claim 37. (New) The method of Claim 35, wherein the agonist decreases or inhibits expression and the antagonist increases or stimulates expression of:

- a) IL-10; or
- b) IFNgamma.

Claim 38. (New) The method of Claim 27, wherein:

- a) the agonist increases attraction of or infiltration by effector cells with a TH2 phenotype; or
- b) the antagonist decreases attraction of or infiltration by effector cells with a TH2 phenotype.

Claim 39. (New) The method of Claim 27, wherein the agonist comprises

- a) a polypeptide of the amino acids as set forth in SEQ ID NO:6;
- b) amino acids 1-131 of SEQ ID NO:6; or
- c) a nucleic acid encoding a polypeptide of the amino acids 1-131 of SEQ ID NO:6.

Claim 40. (New) The method of Claim 27, wherein the antagonist comprises:

- a) a binding composition derived from an antibody that specifically binds to SEQ ID NOs:2, 4, or 6;
- b) a soluble receptor derived from SEQ ID NOs:2 or 4.
- c) a nucleic acid that specifically hybridizes to SEQ ID NOs:1, 3, or 5.

Claim 41. (New) The method of Claim 40, wherein the antagonist comprises:

- a) a polyclonal antibody;
- b) a monoclonal antibody;
- c) a humanized antibody;
- d) an Fab, F(ab')₂, or Fv fragment; or
- e) an anti-sense nucleic acid.

Claim 42. (New) A binding compound comprising an antigen binding portion from an antibody which binds with selectivity to the heterodimeric receptor complex of Claim 22.